Application No. 10/642,625
Amendment dated February 28, 2007
Reply to Office Action of November 28, 2006

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REMARKS

Applicants appreciate the consideration of the present application afforded by the Examiner. Claims 1-18 are currently pending. Claims 1 and 15 are independent. Favorable reconsideration and allowance of the present application are respectfully requested in view of the following remarks.

Objection to the Specification

In the Office Action, the Examiner objects to the specification based on informalities, specifically with respect to reference numbers S1 and S2 not being present in the drawings. The present Amendment removes said reference numbers from the specification. It is respectfully requested that this objection be withdrawn.

Claim Rejections – 35 U.S.C. §103(a)

Claims 1-12, 15, and 16 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 7,041,950 to *Nagano* ("*Nagano*") in view of U.S. Patent No. 7,053,954 to *Canini* ("*Canini*"). Applicants submit the Examiner has failed to establish a *prima facie* case of obviousness and traverse the rejection.

One requirement to establish *prima facie* case of obviousness is that the prior art references, when combined, must teach or suggest all claim limitations. See M.P.E.P. 2142; M.P.E.P. 706.02(j). Thus, if the cited references fail to teach or suggest one or more elements, then the rejection is improper and must be withdrawn.

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In this instance, the Examiner alleges that the "effective areas" of the pixel subregions 119a and 119b of *Nagano* are smaller in area than that of the main region 119c (see *Nagano*, Figs. 4, 6A, and 6B). However, the Examiner also states that said effective areas of the subregions are smaller in area than the main region only "when the aperture is at anything less than a full state" (see Office Action, page 3, lines 16-17). Applicants submit that the *actual* area of pixel subregions 119a and 119b disclosed by *Nagano* is indeed larger than that of the main region 119c (see Fig. 4), and that the claims of the instant invention are directed to an *actual* area of the subregions (see instant drawings, Figs. 2A and 2B) as opposed to any *effective* area. Furthermore, any limitations regarding effective area must be read in light of the functionality of the device in question. For instance, in *Nagano*, the effective areas of the pixel regions are dependent upon the state of the aperture stop 30 (see Fig. 5; col. 7, lines 20-43). When the aperture is at a full state, then even the *effective* areas of the subregions 119a and 119b are larger than the area of main region 119c. Thus, it cannot be said that Nagano discloses a device comprising pixel subregions that are smaller in area than a main region.

Therefore, at least since the applied references fail to show this feature of the instant claims, Applicants submit that claim 1 is patentable over *Nagano* in view of *Canini* and respectfully request that the rejection of claim1 under §103(a) be withdrawn.

Even assuming, *arguendo*, that the subregions of *Nagano* could be interpreted as being smaller in area than the subregions of the instant invention, which Applicants do not concede, it is respectfully submitted that there is no suggestion or motivation within the cited references to modify the references as proposed in the Office Action, as required to establish a *prima facie* case of obviousness. *See M.P.E.P. 2143.01*. In this instance, the Examiner concedes that

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Nagano does not explicitly teach a sensitivity control circuit for comparing actual sensitivity of each of the subregions for a predetermined quantity of light with predetermined sensitivity of the subregion for the predetermined quantity of incident light to determine a sensitivity error and compensating for the sensitivity error, as required by the claims.

The Examiner relies upon the teachings of *Canini* to cure this deficiency, referring to Fig. 6 and col. 7, line 46 – col. 8, line 2. *Canini* appears to teach image processing by which saturation of pixel groups is determined based on a comparison of the values of said pixels with a prefixed local threshold level representative of a condition of saturation of the same pixels (see col. 7, lines 27-37). This saturation condition is used to determine whether over- or under-exposure of the image has taken place. *Canini* teaches altering the exposure time and reiterating the saturation detection procedure until such time as saturation of the image is no longer present (see Fig. 4; col. 5, line 57 – col. 6, line 10).

In direct contrast to the instant invention, *Canini* in no way teaches comparison of a **sensitivity** of a pixel for a predetermined quantity of light with a predetermined **sensitivity** of a pixel for the predetermined quantity of incident light. The Examiner appears to have misinterpreted the comparison of pixel values with the prefixed threshold level, a comparison of **luminosity** (i.e. light intensity) values, with a comparison of the **sensitivity** of a pixel to a certain quantity of light with a predetermined sensitivity to the certain quantity of light (see instant application, Fig. 4, for a graph of a sensitivity as output signal as a function of incident light).

Furthermore, *Canini* in no way teaches or suggests pixel subregions, or even that a saturation detection routine (which is **not** comparable to the sensitivity error correction of the instant claims, as described *supra*) is even applicable to pixel subregions.

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Therefore, the combination of *Nagano* and *Canini* fails to teach or suggest each and every limitation of claim 1. As conceded by the Examiner, *Nagano* fails to teach or suggest "a sensitivity control circuit for comparing actual sensitivity of each of said subregions for a predetermined quantity of light with predetermined sensitivity of the subregion for the predetermined quantity of incident light to determine a sensitivity error and compensating for the sensitivity error" as recited in claim 1. *Canini* cannot be relied upon to correct at least this deficiency of *Nagano*.

Therefore, for at least these reasons, claim 1 is distinguishable from the combination of *Nagano* and *Canini*. Comparable reasoning is hereby applied to method claim 15, and it is respectfully submitted that claim 15 is likewise distinguishable from the combination of *Nagano* and *Canini*.

Claims 2-14 and 16-18 are dependent upon claims 1 and 15. The reference *Gaylord* (U.S. Patent No. 6,628,334), applied by the Examiner to claims 13, 14, 17, and 18, has not been, and indeed cannot be, relied upon to correct the aforementioned deficiency of *Nagano*. Therefore, for at least the reasons stated with respect to claims 1 and 15, claims 2-14 and 16-18 are also distinguishable over the combination of *Nagano* and *Canini*.

Applicant respectfully requests that the rejection of claims 1-18, based on *Nagano* and *Canini*, be withdrawn.
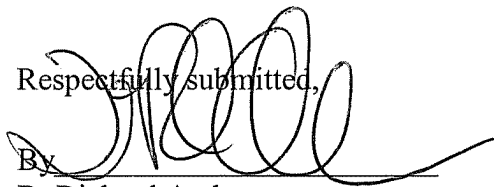
CONCLUSION

All objections and rejections raised in the Office Action having been addressed, it is respectfully submitted that the present application is in condition for allowance. Notice of same is earnestly solicited.

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Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact D. Richard Anderson, Reg. No. 40,439 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

Date: February 28, 2007

Respectfully submitted,

By

D. Richard Anderson
Registration No.: 40,439
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Road
Suite 100 East
P.O. Box 747
Falls Church, Virginia 22040-0747
(703) 205-8000
Attorney for Applicant

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